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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,897	03/19/2001	Kiyoshi Yamaura	09792909-4813	7625

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EXAMINER

YUAN, DAH WEI D

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/811,897

Applicant(s)

YAMAMUA

Examiner

Dah-Wei D. Yuan

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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**NON-AQUEOUS ELECTROLYTE CELL**

Examiner: Yuan

S.N. 09/811,897

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January 22, 2004

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2003 has been entered. Claim 1 was amended. Claims 3-5 were cancelled.

2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on May 20, 2003.

***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

4. The claim rejections under 35 U.S.C. 102(e) as anticipated by Negoro et al. on claims 1-5 are withdrawn, because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 102(e) as anticipated by Kihira et al. on claims 1-5 are withdrawn, because the independent claim 1 has been amended.

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5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahn et al. (US 6,168,887 B1).

Dahn et al. teach a non-aqueous electrolyte battery comprising a positive electrode, a negative electrode and a non-aqueous electrolyte interposed between the positive and negative electrode. The positive electrode active material includes  $\text{Li}_x(\text{Mn}_{1-y}\text{M}_y)\text{O}_{2+z}$  wherein  $0.5 < x < 1.3$ ,  $y$  is  $0 \leq y < 0.4$ ,  $z$  is  $-0.5 < z < 0.5$  and  $M$  is a 3d transition metal, aluminum or lithium and admixtures thereof. In one embodiment, 1M of  $\text{LiPF}_6$  in 33% ethylene carbonate (EC) and 67% diethyl carbonate (DEC) is used as the electrolyte. See Column 3, Lines 25-20; Example 4. It is noted that claim 1 is a product-by-process claim. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Since Dahn's actual positive electrode active material is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.

With respect to claim 2, it is the position of the examiner that such spatial group is inherent, given that the compound in both Dahn et al. and the present application having similar chemistry. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature *is necessarily present in that which is described in the reference*. In re Robertson, 49 USPQ2d 1949 (1999).

***Response to Arguments***

6. Applicant's arguments filed on November 24, 2003 have been fully considered but they are not persuasive.

*Applicant's principle arguments are*

*Dahn et al. disclose the use of  $Mn_2O_3$ ,  $Li_2CO_3$ ,  $Co_3O_4$  and  $Na_2CO_3$  as the starting materials, which are different from the ones recited in claim 1.*

In response to Applicant's arguments, please consider the following comments.

The recitation "said positive electrode comprising a material resulting from a mixture of manganese starting material,  $\gamma$ - $MnO_2$ , a lithium starting material,  $Li_2CO_3$ , and an aluminum starting material,  $Al(OH)_3$ , to form a powder mixture heated in air at a temperature rising rate of  $10^\circ C/min$  to  $1000^\circ C$ " in claim 1 is a process limitation. Since Dahn's final positive electrode active material is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Dah-Wei D. Yuan  
January 22, 2004

A handwritten signature in cursive script, appearing to read "Dah-Wei", followed by a long horizontal flourish.